

Complete Summary

GUIDELINE TITLE

Sexual assault and STDs. Sexually transmitted diseases treatment guidelines 2002.

BIBLIOGRAPHIC SOURCE(S)

Centers for Disease Control and Prevention. Sexual assault and STDs. Sexually transmitted diseases treatment guidelines. MMWR Recomm Rep 2002 May 10; 51(RR-6): 69-74.

GUIDELINE STATUS

Note: This guideline has been updated. The National Guideline Clearinghouse (NGC) is working to update this summary.

COMPLETE SUMMARY CONTENT

SCOPE
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SCOPE

DISEASE/CONDITION(S)

Sexually transmitted diseases (STDs) following sexual assault or sexual abuse

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Prevention
Risk Assessment
Treatment

CLINICAL SPECIALTY

Emergency Medicine
Family Practice
Infectious Diseases
Internal Medicine
Obstetrics and Gynecology
Pediatrics
Preventive Medicine
Urology

INTENDED USERS

Health Care Providers
Managed Care Organizations
Physicians
Public Health Departments

GUIDELINE OBJECTIVE(S)

- To update the 1998 Guidelines for Treatment of Sexually Transmitted Diseases (MMWR 1998; 47[No. RR-1])
- To assist physicians and other health-care providers in preventing and treating sexually transmitted diseases (STDs)
- To present updated recommendations for the evaluation and management of sexually transmitted infections resulting from sexual assault or sexual abuse in adults, adolescents, and children

TARGET POPULATION

Adolescents, adults, and children who have been sexually assaulted or abused

INTERVENTIONS AND PRACTICES CONSIDERED

Note from the National Guideline Clearinghouse and the Centers for Disease Control and Prevention: These guidelines focus on the treatment and counseling of individual patients and do not address other community services and interventions that are important in sexually transmitted disease/human immunodeficiency virus (STD/HIV) prevention.

Management of Sexual Assault in Adults and Adolescents

1. Cultures for *Neisseria gonorrhoeae* and *Chlamydia trachomatis* from specimens of sites of penetration or attempted penetration
2. Food and Drug Administration (FDA)-approved nucleic amplification tests, such as enzyme Immunoassay (EIA), non-amplified probes, and direct fluorescent antibody test
3. Wet mount and culture of vaginal swab specimen for *Trichomonas vaginalis*
4. Collection of serum sample for evaluation for HIV, hepatitis B, and syphilis
5. Follow-up examination with repetition of STD examination (e.g., culture, wet mount, and other tests) within 1-2 weeks of assault

6. Repetition of serological tests for syphilis and HIV 6, 12, and 24 weeks after the assault
7. Postexposure hepatitis B vaccination
8. Empiric antimicrobial regimens for chlamydia, gonorrhea, trichomonas, and bacterial vaginosis, including ceftriaxone, metronidazole, azithromycin, or doxycycline
9. Patient counseling on the symptoms of STDs and the need for immediate examination if symptoms occur
10. Post-exposure therapy for HIV with antiretroviral agents, such as zidovudine

Management of Sexual Assault or Abuse in Children

1. Initial and 2-week follow-up examinations to include the following:
 - Visual inspection of genital, perianal, and oral areas for genital discharge, odor, bleeding, irritation, warts, and ulcerative lesions
 - Specimen collection from all vesicular or ulcerative genital or perianal lesions, compatible with genital herpes, and viral culture.
 - Specimen collection for culture for *Neisseria gonorrhoeae* from the pharynx and anus in both boys and girls, the vagina in girls, and the urethra in boys. For boys with a urethral discharge, a meatal specimen discharge could be substituted for an intraurethral swab specimen.

[Note: Cervical specimens are considered but not recommended for pre-pubertal girls. Gram stains are inadequate to evaluate pre-pubertal children for gonorrhea and should not be used to diagnose or exclude gonorrhea.]

- Cultures for *Chlamydia trachomatis* from specimens collected from the anus in both boys and girls and from the vagina in girls (Cultures of meatal specimens from boys if urethral discharge is present).

[Note: Pharyngeal specimens for *C. trachomatis* are considered but not recommended for children of either sex because the yield is low.]

- Use of standard culture systems for isolation of *C. trachomatis*, with isolation confirmed by microscopic identification of inclusions by staining with fluorescein-conjugated monoclonal antibody specific for *C. trachomatis*
 - Preservation of isolates for repeat testing
 - Nonculture tests for *C. trachomatis*, such as nucleic acid amplification
 - Culture and wet mount of a vaginal swab specimen for *Trichomonas vaginalis* infection and bacterial vaginosis.
 - Collection of a serum sample and testing for *Treponema pallidum*, HIV, and hepatitis B surface antigen.
2. Postexposure assessment with 72 hours of sexual assault to include the following:
 - Assessing risk for HIV infection in the assailant
 - Evaluating circumstances in assault that may affect risk for HIV transmission
 - Consulting with specialists in treating HIV-infected children if postexposure prophylaxis is considered
 - Discussing HIV prophylaxis with caregiver(s)

- Providing antiretroviral medication
 - Performing HIV antibody testing at original assessment, 6 weeks, 3 months, and 6 months
3. Examination 12 weeks after assault and testing for syphilis, HIV, and hepatitis B, if initial tests are negative
 4. Presumptive treatment for STDs
 5. Reporting of child abuse to state or local child-protection services

MAJOR OUTCOMES CONSIDERED

- Microbiologic cure
- Alleviation of signs and symptoms
- Prevention of sequelae
- Prevention of transmission
- Prevalence of and risk for sexually transmitted diseases (STDs) in assault and abuse cases
- Sensitivity and specificity of diagnostic tests

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Subjective Review

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Beginning in 2000, Centers for Disease Control and Prevention (CDC) personnel and professionals knowledgeable in the field of sexually transmitted diseases (STDs) systematically reviewed literature (i.e., published abstracts and peer-

reviewed journal articles) concerning each of the major STDs, focusing on information that had become available since publication of the 1998 Guidelines for Treatment of Sexually Transmitted Diseases. Background papers were written and tables of evidence constructed summarizing the type of study (e.g., randomized controlled trial or case series), study population and setting, treatments or other interventions, outcome measures assessed, reported findings, and weaknesses and biases in study design and analysis. A draft document was developed on the basis of the reviews.

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Note: This guideline has been updated. The National Guideline Clearinghouse (NGC) is working to update this summary. The recommendations that follow are based on the previous version of the guideline.

Note from the National Guideline Clearinghouse and the Centers for Disease Control and Prevention: When more than one therapeutic regimen is recommended, the sequence is alphabetized unless the choices for therapy are prioritized based on efficacy, convenience, or cost. For sexually transmitted diseases (STDs) with more than one recommended regimen, almost all regimens have similar efficacy and similar rates of intolerance or toxicity unless otherwise specified.

Adults and Adolescents

The recommendations in this report are limited to the identification, prophylaxis, and treatment of sexually transmitted infections and conditions commonly

identified in the management of such infections. The documentation of findings, collection of non-microbiologic specimens for forensic purposes, and the management of potential pregnancy or physical and psychological trauma are beyond the scope of this report. Examinations of survivors of sexual assault should be conducted so as to minimize further trauma to the survivor and should be performed by an experienced clinician. The decision to obtain genital or other specimens for STD diagnosis should be made on an individual basis. Mechanisms to ensure continuity of care (including timely review of the results of any tests obtained) and to monitor compliance with and adverse reactions to any therapeutic or prophylactic regimens should be in place in any setting where survivors of sexual assault are examined. Laws in all 50 states strictly limit the evidentiary use of a survivor's prior sexual history, including evidence of previously acquired STDs, as part of an effort to undermine the credibility of the survivor's testimony. Evidentiary privilege against revealing any aspect of the examination or treatment is enforced in most states. In unanticipated, exceptional situations, STD diagnoses may later be accessed, and the survivor and clinician may opt to defer testing for this reason. However, collection of specimens at initial examination for laboratory STD diagnosis gives the survivor and clinician the option to defer empiric prophylactic antimicrobial treatment. Among sexually active adults, the identification of sexually transmitted infection after an assault is usually more important for the psychological and medical management of the patient than for legal purposes, because the infection could have been acquired before the assault.

Trichomoniasis, bacterial vaginosis (BV), gonorrhea, and chlamydial infection are the most frequently diagnosed infections among women who have been sexually assaulted. Because the prevalence of these infections is high among sexually active women, their presence after an assault does not necessarily signify acquisition during the assault. A post-assault examination is, however, an opportunity to identify or prevent sexually transmitted infections, regardless of whether they were acquired during an assault. Chlamydial and gonococcal infections in women are of particular concern because of the possibility of ascending infection. In addition, post-assault evaluation can detect hepatitis B virus (HBV) infection, which may be prevented by postexposure administration of hepatitis B vaccine. Reproductive-aged female survivors should be evaluated for pregnancy, if appropriate.

Evaluation for Sexually Transmitted Infections

Initial Examination

An initial examination should include the following procedures.

- Cultures for *Neisseria gonorrhoeae* and *Chlamydia trachomatis* from specimens collected from any sites of penetration or attempted penetration.
- Food and Drug Administration (FDA)-approved nucleic acid amplification tests (as a substitute for culture). Nucleic acid amplification tests offer the advantage of increased sensitivity. If a nucleic acid amplification test is used, a positive test result should be confirmed by a second test. Confirmation tests should consist of a second FDA-licensed nucleic acid amplification test that targets a different sequence from the initial test. Enzyme immunoassay (EIA), non-amplified probes, and direct fluorescent antibody tests are not acceptable

- alternatives for culture, because false-negative test results occur more often with these nonculture tests, and false-positive test results also may occur.
- Wet mount and culture of a vaginal swab specimen for *Trichomonas vaginalis* infection. If vaginal discharge, malodor, or itching is evident, the wet mount also should be examined for evidence of BV and candidiasis.
 - Collection of a serum sample for immediate evaluation for human immunodeficiency virus (HIV), hepatitis B, and syphilis (see "Prophylaxis, Risk for Acquiring HIV Infection" and "Follow-up Examinations 12 Weeks After Recent Assault" sections below).

Follow-Up Examinations

Although persons may have difficulty in complying with follow-up examinations several weeks following an assault, such examinations are essential because they provide an opportunity to a) detect new infections acquired during or after the assault; b) complete hepatitis B immunization, if indicated; and c) complete counseling and treatment for other STDs.

Examination for STDs should be repeated within 1--2 weeks of the assault. Because infectious agents acquired through assault may not have produced sufficient concentrations of organisms to result in positive test results at the initial examination, a culture (or cultures), a wet mount, and other tests should be repeated at the follow-up visit unless prophylactic treatment was provided. If treatment was provided, testing should be done only if the survivor reports having symptoms. If treatment was not provided, follow-up examination should be conducted within a week to ensure that results of positive tests can be discussed promptly with the survivor and that treatment is provided. Serologic tests for syphilis and HIV infection should be repeated 6, 12, and 24 weeks after the assault if initial test results were negative and these infections are likely to be present in the assailant (see "Risk of Acquiring HIV Infection" section below).

Prophylaxis

Many specialists recommend routine preventive therapy after a sexual assault because follow-up of survivors of sexual assault can be difficult and because these persons may be reassured if offered treatment or prophylaxis for possible infection. The following prophylactic regimen is suggested as preventive therapy.

- Postexposure hepatitis B vaccination, without hepatitis B immune globulin (HBIG), should adequately protect against HBV. Hepatitis B vaccine should be administered to sexual assault victims at the time of the initial examination if they have not been previously vaccinated. Follow-up doses of vaccine should be administered 1--2 and 4--6 months after the first dose.
- An empiric antimicrobial regimen for chlamydia, gonorrhea, trichomonas, and BV may be administered.

Recommended Regimen for Prophylaxis

Ceftriaxone 125 mg intramuscularly (IM) in a single dose

PLUS

Metronidazole 2 g orally in a single dose

PLUS

Azithromycin 1 g orally in a single dose

OR

Doxycycline 100 mg orally twice a day for 7 days.

Note: For patients requiring alternative treatments, see the other guidelines issues by the Centers for Disease Control and Prevention (CDC) that specifically address the appropriate agent. The efficacy of these regimens in preventing gonorrhea, trichomoniasis, BV, and Chlamydia trachomatis genitourinary infections after sexual assault has not been evaluated. Clinicians should counsel patients regarding the possible benefits, as well as the possible toxicity, associated with these treatment regimens; gastrointestinal side effects can occur with this combination. Providers may also consider anti-emetic medications if prophylaxis is administered, particularly if emergency contraception is also provided.

Other Management Considerations

At the initial examination and, if indicated, at follow-up examinations, patients should be counseled regarding the following:

- symptoms of STDs and the need for immediate examination if symptoms occur
- abstinence from sexual intercourse until STD prophylactic treatment is completed

Risk for Acquiring HIV Infection

Although HIV-antibody seroconversion has been reported among persons whose only known risk factor was sexual assault or sexual abuse, the risk for acquiring HIV infection through a single episode of sexual assault is likely low. The overall probability of HIV transmission during a single act of intercourse from a person known to be HIV-infected, however, depends on many factors, and in specific circumstances could be high. These factors may include the type of sexual intercourse (i.e., oral, vaginal, or anal); presence of oral, vaginal, or anal trauma (including bleeding); site of exposure to ejaculate; viral load in ejaculate; and presence of an STD or genital lesions in assailant or survivor. Children may be at higher risk for transmission, because child sexual abuse is often associated with multiple episodes of assault and may result in mucosal trauma (see "Sexual Assault or Abuse of Children" section below).

In certain circumstances, the potential of HIV transmission has been reduced by postexposure therapy for HIV with antiretroviral agents. Postexposure therapy with zidovudine has been associated with a reduced risk for HIV infection in a study of health-care workers who had percutaneous exposures to HIV-infected blood. On the basis of these results and the biologic plausibility of the

effectiveness of antiretroviral agents in preventing infection, postexposure therapy has been recommended for health-care workers who have occupational exposures to HIV. The degree to which these findings can be extrapolated to other HIV-exposure situations, including sexual assault, is unknown. Although a definitive recommendation cannot be made regarding postexposure antiretroviral therapy after sexual exposure to HIV, such therapy should be considered in cases in which the risk for HIV exposure during the assault is likely high.

Health-care providers who consider offering postexposure therapy should take into account the likelihood of exposure to HIV, the potential benefits and risks of such therapy, and the interval between the exposure and initiation of therapy. Timely determination of the HIV-infection status of the assailant is not possible in many sexual assaults. Therefore, the health-care provider should assess the local epidemiology of HIV/AIDS, the nature of the assault, and any available information about HIV-risk behaviors exhibited by the assailant(s) (e.g., high-risk sexual practices and injection-drug or crack cocaine use). When an assailant's HIV status is unknown, factors that should be considered in determining whether an increased risk of HIV transmission exists include a) whether oral, vaginal, or anal penetration occurred; b) whether ejaculation occurred on mucous membranes; c) whether multiple assailants were involved; d) whether mucosal lesions are present in assailant or survivor; and e) other characteristics of the assault, survivor, or assailant. If antiretroviral postexposure prophylaxis is offered, the following information should be discussed with the patient: a) the unknown efficacy and known toxicities of antiretrovirals; b) the close follow-up that is necessary; c) the importance of strict compliance with the recommended therapy; and d) the necessity of immediate initiation of treatment for maximal likelihood of effectiveness (as soon as possible after, and up to 72 hours following, the most recent assault). Providers should emphasize that although data are limited, postexposure antiretroviral therapy appears to be well tolerated in both adults and children, and severe adverse effects are rare. Personnel likely to examine survivors of sexual assault should consult with federal or state health departments or other professionals knowledgeable in STDs to develop algorithms and protocols for the determination of risk for exposure to HIV and management in their community. Clinical management of the patient should be implemented according to the following guidelines (Bamberger, et al, 1999; CDC, 1998). If postexposure HIV prophylaxis is being considered, consultation with an HIV specialist is recommended.

Recommendations for Postexposure Assessment of Adolescent and Adult Survivors within 72 hours of Sexual Assault

- Review HIV/acquired immunodeficiency syndrome (AIDS) local epidemiology and assess risk for HIV infection in assailant.
- Evaluate circumstances of assault that may affect risk for HIV transmission.
- Consult with a specialist in HIV treatment if postexposure prophylaxis is considered.
- If the survivor appears to be at risk for HIV transmission from the assault, discuss antiretroviral prophylaxis, including toxicity and unknown efficacy.
- If the survivor chooses to receive antiretroviral postexposure prophylaxis (Bamberger, et al, 1999), provide enough medication to last until the next return visit; reevaluate survivor 3--7 days after initial assessment and assess tolerance of medications.

- Perform HIV antibody test at original assessment; repeat at 6 weeks, 3 months, and 6 months.

Sexual Assault or Abuse of Children

Recommendations in this report are limited to the identification and treatment of STDs. Management of the psychosocial aspects of the sexual assault or abuse of children is beyond the scope of these recommendations.

The identification of sexually transmissible agents in children beyond the neonatal period suggests sexual abuse. The significance of the identification of a sexually transmitted agent in such children as evidence of possible child sexual abuse varies by pathogen. Postnatally acquired gonorrhea; syphilis; and non-transfusion, non-perinatally acquired HIV are usually diagnostic of sexual abuse. Sexual abuse should be suspected in the presence of genital herpes. The investigation of sexual abuse among children who possibly have a sexually transmitted infection should be conducted in compliance with recommendations by clinicians who have experience and training in all elements of the evaluation of child abuse, neglect, and assault (American Academy of Pediatrics, 2000; American Academy of Pediatrics Committee on Child Abuse and Neglect, 1999; Adams, Harper, & Knudson, 1992). The social significance of each sexually transmitted infection and the recommended action regarding reporting of suspected child sexual abuse varies by STD (see Table 5 of the original guideline document). In all cases in which a sexually transmitted infection has been diagnosed in a child, efforts should be made to detect evidence of sexual abuse, including conducting diagnostic testing for other commonly occurring sexually transmitted infections (American Academy of Pediatrics, 2000; American Academy of Pediatrics Committee on Child Abuse and Neglect, 1999).

The general rule that sexually transmissible infections beyond the neonatal period are evidence of sexual abuse has exceptions. For example, rectal or genital infection with *Chlamydia trachomatis* among young children may be the result of perinatally acquired infection and has, in some cases, persisted for as long as 2--3 years. Genital warts have been diagnosed in children who have been sexually abused, but also in children who have no other evidence of sexual abuse. BV has been diagnosed in children who have been abused, but its presence alone does not prove sexual abuse. Most HBV infections in children result from household exposure to persons who have chronic HBV infection.

The possibility of sexual abuse should be strongly considered if no conclusive explanation for non-sexual transmission of a sexually transmitted infection can be identified. When the only evidence of sexual abuse is the isolation of an organism or the detection of antibodies to a sexually transmissible agent, findings should be confirmed and the implications considered carefully.

Evaluation for Sexually Transmitted Infections

Examinations of children for sexual assault or abuse should be conducted so as to minimize pain and trauma to the child. Collection of vaginal specimens in prepubertal children can be very uncomfortable and should be performed by an experienced clinician to avoid psychological and physical trauma to the child. The decision to obtain genital or other specimens from a child to conduct an STD

evaluation must be made on an individual basis. The following situations involve a high risk for STDs and constitute a strong indication for testing.

- The child has or has had symptoms or signs of an STD or of an infection that can be sexually transmitted, even in the absence of suspicion of sexual abuse. Among the signs that are associated with a confirmed STD diagnosis are vaginal discharge or pain; genital itching or odor; urinary symptoms; and genital ulcers or lesions (Shapiro, Schubert, & Siegel, 1999).
- A suspected assailant is known to have an STD or to be at high risk for STDs (e.g., has multiple sex partners or a history of STDs).
- A sibling or another child or adult in the household or child's immediate environment has an STD (Lagerberg, 1998).
- The patient or parent requests testing.
- The prevalence of STDs in the community is high.
- Evidence of genital, oral, or anal penetration or ejaculation is present.

If a child has symptoms, signs, or evidence of an infection that might be sexually transmitted, the child should be tested for other common STDs before the initiation of any treatment that could interfere with the diagnosis of those other STDs. Because of the legal and psychosocial consequences of a false-positive diagnosis, only tests with high specificities should be used. The potential social benefit to the child of a reliable diagnosis of an STD justifies deferring presumptive treatment until specimens for highly specific tests are obtained by providers with experience in the evaluation of sexually abused and assaulted children.

The scheduling of examination should depend on the history of assault or abuse. If the initial exposure was recent, the infectious agents acquired through the exposure may not have produced sufficient concentrations of organisms to result in positive test results. A follow-up visit approximately 2 weeks after the most recent sexual exposure may include a repeat physical examination and collection of additional specimens. To allow sufficient time for antibodies to develop, another follow-up visit approximately 12 weeks after most recent sexual exposure may be necessary to collect sera. A single examination may be sufficient if the child was abused for an extended time period and if the last suspected episode of abuse occurred well before the child received medical evaluation.

The following recommendations for scheduling examinations serve as a general guide. The exact timing and nature of follow-up examinations should be determined on an individual basis and should be performed so as to minimize the possibility for psychological trauma and social stigma. Compliance with follow-up appointments might be improved when law enforcement personnel or child protective services are involved.

Initial and 2-Week Follow-Up Examinations

During the initial examination and 2-week follow-up examination (if indicated), the following should be performed.

- Visual inspection of the genital, perianal, and oral areas for genital discharge, odor, bleeding, irritation, warts, and ulcerative lesions. The clinical manifestations of some STDs are different in children than in adults. For

example, typical vesicular lesions may not be present in the presence of herpes simplex virus infection. Because this infection is indicative of probable sexual abuse, specimens should be obtained from all vesicular or ulcerative genital or perianal lesions compatible with genital herpes and then sent for viral culture.

- Specimen collection for culture for *Neisseria gonorrhoeae* from the pharynx and anus in both boys and girls, the vagina in girls, and the urethra in boys. Cervical specimens are not recommended for pre-pubertal girls. For boys with a urethral discharge, a meatal specimen discharge is an adequate substitute for an intraurethral swab specimen. Only standard culture systems for the isolation of *Neisseria gonorrhoeae* should be used. All presumptive isolates of *Neisseria gonorrhoeae* should be confirmed by at least two tests that involve different principles (i.e., biochemical, enzyme substrate, serologic, or deoxyribonucleic acid [DNA] probe methods). Isolates and specimens should be retained or preserved in case additional or repeated testing is needed. Gram stains are inadequate to evaluate pre-pubertal children for gonorrhea and should not be used to diagnose or exclude gonorrhea.
- Cultures for *Chlamydia trachomatis* from specimens collected from the anus in both boys and girls and from the vagina in girls. Some data suggest that the likelihood of recovering *Chlamydia trachomatis* from the urethra of prepubertal boys is too low to justify the trauma involved in obtaining an intraurethral specimen. However, a meatal specimen should be obtained if urethral discharge is present. Pharyngeal specimens for *Chlamydia trachomatis* are not recommended for children of either sex because the yield is low, perinatally acquired infection may persist beyond infancy, and culture systems in some laboratories do not distinguish between *Chlamydia trachomatis* and *Chlamydia pneumoniae*. Only standard culture systems for the isolation of *Chlamydia trachomatis* should be used. The isolation of *Chlamydia trachomatis* should be confirmed by microscopic identification of inclusions by staining with fluorescein-conjugated monoclonal antibody specific for *Chlamydia trachomatis*; EIAs are not acceptable confirmatory methods. Isolates should be preserved. Nonculture tests for chlamydia (e.g., non-amplified probes, EIAs, and direct fluorescent antibody [DFA]), are not sufficiently specific for use in circumstances involving possible child abuse or assault. Data are insufficient to adequately assess the utility of nucleic acid amplification tests in the evaluation of children who might have been sexually abused, but these tests may be an alternative only if confirmation is available and culture systems for *Chlamydia trachomatis* are unavailable. Confirmation tests should consist of a second FDA-approved nucleic acid amplification test that targets a different sequence from the initial test.
- Culture and wet mount of a vaginal swab specimen for *Trichomonas vaginalis* infection and BV.
- Collection of a serum sample to be evaluated immediately, preserved for subsequent analysis, and used as a baseline for comparison with follow-up serologic tests. Sera should be tested immediately for antibodies to sexually transmitted agents. Agents for which suitable tests are available include *Treponema pallidum*, HIV, and hepatitis B surface antigen (HBsAg). Decisions regarding which agents to use for serologic tests should be made on a case-by-case basis (see "Examination 12 Weeks after Assault" section below)

HIV infection has been reported in children whose only known risk factor was sexual abuse. Serologic testing for HIV infection should be considered for abused children. The decision to test for HIV infection should be made on a case-by-case

basis, depending on the likelihood of infection among assailant(s). Data are insufficient concerning the efficacy and safety of postexposure prophylaxis among both children and adults. However, antiretroviral treatment is well tolerated by infants and children with and without HIV infection; in addition, children who receive such treatment have a minimal risk for serious adverse reactions because of the short period of time recommended for prophylaxis (CDC, 2001; Dominguez & Simonds, 1999). In those cases in which a child presents to a health-care provider shortly after a sexual exposure (i.e., within 72 hours), the assailant(s) are likely to be at risk for HIV infection, and likelihood of compliance with treatment regimens is high, the potential benefit of treating a sexually abused child should be weighed against the risk for adverse reactions. If antiretroviral postexposure prophylaxis is being considered, a professional specializing in HIV-infected children should be consulted.

Recommendations for Postexposure Assessment of Children within 72 Hours of Sexual Assault

- Review HIV/AIDS local epidemiology and assess risk for HIV infection in the assailant.
- Evaluate circumstances of assault that may affect risk for HIV transmission.
- Consult with a specialist in treating HIV-infected children if postexposure prophylaxis is considered.
- If the child appears to be at risk for HIV transmission from the assault, discuss postexposure prophylaxis with the caregiver(s), including its toxicity and its unknown efficacy.
- If caregivers choose for the child to receive antiretroviral postexposure prophylaxis (CDC, 2002; Dominguez & Simmons, 1999), provide enough medication until the return visit at 3--7 days after initial assessment to reevaluate child and to assess tolerance of medication; dosages should not exceed those for adults.
- Perform HIV antibody test at original assessment, 6 weeks, 3 months, and 6 months.

Examination 12 Weeks After Assault

In circumstances in which transmission of syphilis, HIV, or hepatitis B is a concern but baseline tests are negative, an examination approximately 12 weeks after the last suspected sexual exposure is recommended to allow time for antibodies to infectious agents to develop. The prevalence of these infections differs substantially by community. In addition, results of HBsAg testing must be interpreted carefully, because HBV can be transmitted non-sexually. Decisions regarding which tests should be performed must be made on an individual basis.

Presumptive Treatment

The risk of a child acquiring an STD as a result of sexual abuse or assault has not been determined. Presumptive treatment for children who have been sexually assaulted or abused is not recommended because a) the prevalence of most STDs is low following abuse/assault, b) pre-pubertal girls appear to be at lower risk for ascending infection than adolescent or adult women, and c) regular follow-up of children usually can be ensured. However, some children or their parent(s) or guardian(s) may be concerned about the possibility of infection with an STD, even

if the risk is perceived to be low by the health-care provider. Such concerns may be an appropriate indication for presumptive treatment in some settings and may be considered after all specimens for diagnostic tests relevant to the investigation have been collected.

Reporting

Every state and U.S. territory has laws that require the reporting of child abuse. Although the exact requirements differ by state, if a health-care provider has reasonable cause to suspect child abuse, a report must be made. Health-care providers should contact their state or local child-protection service agency about child-abuse reporting requirements in their areas.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

[References open in a new window](#)

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

Throughout the 2002 guideline document, the evidence used as the basis for specific recommendations is discussed briefly. More comprehensive, annotated discussions of such evidence will appear in background papers that will be published in a supplement issue of the journal Clinical Infectious Diseases.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Appropriate diagnosis, treatment, and management of sexually transmitted diseases in victims of sexual assault or abuse.
- Possibility of preventing sexually transmitted diseases, such as, hepatitis B, chlamydia, gonorrhea, trichomonas, bacterial vaginosis, and HIV with prophylaxis treatment in victims of sexual assault or abuse.

POTENTIAL HARMS

There are possible toxicities associated with the antimicrobial regimens prescribed for prophylaxis of chlamydia, gonorrhea, trichomonas, and bacterial vaginosis; gastrointestinal side effects can occur with the combination treatment.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- These recommendations were developed in consultation with public- and private-sector professionals knowledgeable in the treatment of patients with sexually transmitted diseases (STDs). They are applicable to various patient-care settings, including family planning clinics, private physicians' offices, managed care organizations, and other primary-care facilities. When using these guidelines, the disease prevalence and other characteristics of the medical practice setting should be considered. These recommendations should be regarded as a source of clinical guidance and not as standards or inflexible rules. These guidelines focus on the treatment and counseling of individual patients and do not address other community services and interventions that are important in sexually transmitted disease/human immunodeficiency virus (STD/HIV) prevention.
- The recommendations in this report are limited to the identification, prophylaxis, and treatment of sexually transmitted infections and conditions commonly identified in the management of such infections. The documentation of findings, collection of non-microbiologic specimens for forensic purposes, and the management of potential pregnancy or physical and psychological trauma are beyond the scope of this report.
- Management of the psychosocial aspects of the sexual assault or abuse of children is beyond the scope of these recommendations.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

IMPLEMENTATION TOOLS

Personal Digital Assistant (PDA) Downloads

For information about [availability](#), see the "Availability of Companion Documents" and "Patient Resources" fields below.

RELATED QUALITY TOOLS

- [A Pocket Guide to Adult HIV/AIDS Treatment: Companion to A Guide to Primary Care of People with HIV/AIDS August 2004 Edition](#)

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Staying Healthy

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Centers for Disease Control and Prevention. Sexual assault and STDs. Sexually transmitted diseases treatment guidelines. MMWR Recomm Rep 2002 May 10;51(RR-6):69-74.

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

1993 (revised 2002 May 10)

GUIDELINE DEVELOPER(S)

Centers for Disease Control and Prevention - Federal Government Agency [U.S.]

GUIDELINE DEVELOPER COMMENT

These guidelines for the treatment of patients who have sexually transmitted diseases (STDs) were developed by the Centers for Disease Control and Prevention (CDC) after consultation with a group of professionals knowledgeable in the field of STDs who met in Atlanta on September 26--28, 2000.

SOURCE(S) OF FUNDING

United States Government

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Not stated

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

Note: This guideline has been updated. The National Guideline Clearinghouse (NGC) is working to update this summary.

GUIDELINE AVAILABILITY

Electronic copies of the updated guideline: Available from the [Centers for Disease Control and Prevention \(CDC\) Web site](#).

Print copies: Available from the Centers for Disease Control and Prevention, MMWR, Atlanta, GA 30333. Additional copies can be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402-9325; (202) 783-3238.

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Workowski KA, Levine WC, Wasserheit JN. U.S. Centers for Disease Control and Prevention guidelines for the treatment of sexually transmitted diseases: an opportunity to unify clinical and public health practice. *Ann Intern Med*. 2002 Aug 20; 137(4): 255-62. Electronic copies: Available through [Annals of Internal Medicine Online](#).
- Sexually Transmitted Diseases Treatment Guidelines 2002 for PDA or Palm OS. Available from the [CDC National Prevention Information Network \(NPIN\) Web site](#).

PATIENT RESOURCES

None available

NGC STATUS

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